

CLAIMS

1 – A differential culture medium for the enumeration of food and beverage contaminant yeasts of the *Dekkera* and *Brettanomyces* genera, characterized by containing ethanol as the only energy source, that in combination with *p*-cumaric acid, an acid-base indicator with turning points in the acid range, an antibiotic to inhibit the growth of some yeast species, and optionally a bacteria growth inhibitor and agar-agar, allows the selective and differential growth of the said yeasts in food and beverages products.

2 – A culture medium according to claim 1, characterized in that the present amount of ethanol is from 32 to 96 g/L, preferably 48 g/L.

3 – A culture medium according to claim 1, characterized in that the present amount of *p*-cumaric acid is from 0.05 to 1.0 g/L, preferably 0.1 g/L.

4 – A culture medium according to claim 1, characterized in that the nutrient base has a composition of any "Yeast Nitrogen Base" type, in a total amount ranging from 5 to 10 g/L, preferably 6.7 g/L.

5 – A culture medium according to claim 1, characterized in that the inhibitor antibiotic for some of the yeast species is cycloheximide, present in an amount from 0.004 to 0.1 g/L, preferably 0.01 g/L.

6 – A culture medium according to claim 1, characterized in that the pH indicator with a turning point in the acid range is bromocresol green, present in an amount of 0.022 g/L.

7 – A culture medium according to claim 6, characterized in that the medium pH is adjusted with HCl, or any other acid of similar strength, to a value between 4.8 and 6.0, preferably 5.4.

8 – A culture medium according to claim 1, characterized in that it additionally contains a bacteria growth inhibitor, preferably chloramphenicol and/or oxytetracycline, in an amount of 0.1 g/L, to detect and identify yeasts of the *Dekkera* and *Brettanomyces* genera in food and beverage products containing mixed populations of yeasts and bacteria.

9 – A culture medium according to claim 1, characterized in that it contains all the components except agar-agar, to detect and identify yeasts of the *Dekkera* and *Brettanomyces* genera in food and beverage products containing mixed populations of yeasts, bacteria and particularly filamentous fungi.

10 – A differential culture medium for enumeration of food and beverage contaminant yeasts of the *Dekkera* and *Brettanomyces* genera, characterized in that it has the following composition: 5 to 10 g/L, preferably 6.7 g/L, of a "Yeast Nitrogen Base" type medium; 0.004 to 0.1 g/L, preferably 0.01 g/L, of cycloheximide; 0.05 to 1.0 g/L, preferably 0.1 g/L, of *p*-cumaric acid; 0.022 g/L of bromocresol green, or another acid-base indicator with similar turning points; 32 to 96 g/L, preferably 48 g/L, of ethanol; 0.1 g/L of chloramphenicol and/or 0.1 g/L of oxytetracycline, and 20 g/L of agar-agar, the pH of the medium being adjusted between 4.8 and 6.0, preferably 5.4, with HCl, or any other acid of similar strength.

11 – A differential culture medium for enumeration of food and beverage contaminant yeasts of the *Dekkera* and *Brettanomyces* genera according to claim 1, characterized by the sterilization of all the components is done by filtration, except for the agar-agar which is sterilized in autoclave; the addition under aseptic conditions to this solution, after agar-agar cooling and before it solidifies, of all the other components of the medium, previously sterilized by filtration; and the dispensing of the medium into Petri dishes so that it solidifies.

12 – A process for the detection, identification, and/or enumeration of yeasts of the *Dekkera* and *Brettanomyces* genera, characterized by the use of a differential culture medium according to claims 10 and 11, which after inoculation with a food or beverage sample containing yeasts of the said genera and incubation for 5 to

12 days at $25 \pm 3^\circ\text{C}$, allows the detection, identification and/or enumeration of the said yeasts by means of a change in the medium color from blue to yellow, development of cream colored colonies, and the formation of a phenol-like aroma, being these three features characteristic of yeasts of the *Dekkera* and
5 *Brettanomyces* genera.

13 – Use of a culture medium according to claims 10 and 12, for inclusion in an identification gallery, together with other yeast identification tests.

10 14 – Use of a culture medium according to claims 10 and 12 in an industry, particularly in the quality and process control in a food and beverage industry.